

How DEC Makes Cleanup Decisions

Who Cleans Up A Hazardous Substance Release?

DEC's mission is to protect the health of people and the environment from the release of hazardous substances. This fact sheet describes how DEC makes cleanup decisions.

Federal and state laws require a person responsible for a spill or release to report, contain and clean it up. Most of the time, the **responsible party** (RP) reports the spill and undertakes a cleanup as required. DEC's Prevention and Emergency Response Program responds to new spills of petroleum products. Their job is to ensure the spilled product is adequately recovered, contained and removed from the environment. If it cannot be recovered or removed in a timely manner, DEC's Contaminated Sites Program becomes involved.

The long-term management of contaminated sites entails development of cleanup plans to remove the contamination and/or ensure it does not pose a risk to human health or the environment. DEC must approve the RP's cleanup plans, oversee the cleanup, and ensure that cleanup goals are met.

In some cases the RP may not be easily identified or may be unwilling or unable to clean up the site. If the RP cannot be found or fails to act, DEC may take the lead role in a State-funded cleanup. These cleanups are funded by legislative appropriations (i.e. Capital Improvement Projects) and/or Alaska's Oil and Hazardous Substance Release Response Fund, generated by a tax on the production of crude oil.

When DEC assumes the lead in a cleanup action, we hire environmental contractors to clean up sites and attempt to recover money from any RPs identified.

The U.S. Environmental Protection Agency (EPA) may also be involved in site cleanup through a process established in the federal Comprehensive Environmental Response Compensation and Liability Act, or "CERCLA." CERCLA created a Superfund, which EPA can use to clean up the nation's worst sites

with non-petroleum contamination. Alaska has seven sites which follow CERCLA's cleanup process. DEC stays involved in these cleanups because state standards must also be met.

How are Site Cleanups Prioritized?

The priority of site cleanup actions are based on the risk posed to human health and the environment.

The more serious the risk, the faster the cleanup must occur. If an RP is unwilling or unable to act promptly, DEC or EPA may take emergency action to contain or clean up a spill or a contaminated site.

Environmental cleanups can be costly, complicated, and time consuming. This is especially true in Alaska where arctic and subarctic conditions exist and only provide short time periods each year to conduct cleanups.

How Clean is Clean?

<u>Soil</u>: DEC is responsible for setting cleanup levels at a site. State regulations¹ provide four different methods to set soil cleanup levels at a site, including:

- A table that sets cleanup levels for petroleum contaminants;
- A table that sets regional cleanup levels for petroleum and 160 other hazardous substances;
- DEC-approved modification of the regional cleanup levels, based on site-specific conditions, or intended site use;
- DEC-approved cleanup level, based on a sitespecific **risk assessment**.

The process allows an RP to propose a cleanup level based on one of the four methods, and DEC approves or disapproves it based on site specific conditions. If DEC or EPA is doing the cleanup, the agency follows the same process in determining the appropriate cleanup level. The level approved is one that will ensure human health and the environment are not at risk from the contamination.

¹ Title 18 of the Alaska Administrative Code, chapter 75, or "18 AAC 75."

<u>Groundwater:</u> The cleanup regulations also provide three methods to establish groundwater cleanup levels at a site. They include:

- A table that sets cleanup levels for groundwater based on drinking water standards;
- A level 10 times the cleanup levels in the table.
 This may be used if the responsible party can demonstrate that the groundwater will not be used as drinking water;
- An alternate cleanup level based on a site specific risk assessment.

How is the Cleanup Goal Reached?

Often there may be more than one cleanup method that will work at a site to eliminate or minimize the risk from contamination and achieve the cleanup level. Another DEC fact sheet describes the various cleanup methods — see the website address at the bottom of the page for this and other fact sheets. Below are the criteria considered in DEC's decision to approve a method:

- What risk is posed by the contamination?
- Does the risk require immediate cleanup action or may cleanup occur over time?
- Is the method effective in cleaning up the contamination at the site?
- Does the method work in Alaska's climate?
- What logistics and support are required, including whether equipment must or can be moved to the site or *vice versa* and whether fuel, power, manpower, and other requirements can be provided?
- How long it will take to complete the cleanup?
- What is the cost effectiveness of one method versus another?

Glossary

Groundwater - water stored under the surface of the ground in the tiny pore spaces between rock, sand, soil, and gravel. There is a separate fact sheet available for groundwater. Please ask by contacting one of the DEC offices listed below.

Risk assessment - an evaluation of the risk which hazardous substances may pose to peoples' health and the environment. A risk assessment is based on:

- 1. The level of contamination;
- 2. The possibility of the contamination moving in soil, air, or water;
- 3. If and how people could come into contact with it; and
- 4. How harmful the it could be to people and the environment.

RP - Responsible Party. A responsible party is a person or organization who owned the hazardous substance released, caused the release, owns the property where the release occurred, or is otherwise responsible for the cleanup.



Reference List

Alaska Statutes, Title 43, Chapters 03, 08, and 09

ADEC Oil and Hazardous Substances Control regulations; Alaska Administrative Code Title 18, Chapter 75 (18 AAC 75)

EPA; National Contingency Plan, Code of Federal Regulations, Title 40, Part 302 (40 CFR 302)

This fact sheet is one of a series of free publications prepared by DEC to help people understand contaminated site cleanup issues. The others can be found at www.state.ak.us/dec/spar/faq.htm#csp

For More Information

Alaska Department of Environmental Conservation, Contaminated Sites Program

Main Offices: Anchorage: 907-269-7558 Juneau: 907-465-5390 Kenai: 907-262-5210 Fairbanks: 907-451-2153

Internet Homepage: www.state.ak.us/dec/spar/csp

This brochure is a free publication providing current information on DEC's Contaminated Sites Remediation Program. Contents may be reprinted without permission; credit would be appreciated. The Alaska Department of Environmental Conservation complies with Title II of the Americans with Disabilities Act of 1990. This publication is available in alternative communication formats upon request. Please contact the State Human Resources office, at 465-2463, to make necessary arrangements.